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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/731,928

12/09/2003

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16869K-102300US

6655

20350 7590 07/22/2008
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EXAMINER

CHUMPITAZ, BOB R

ART UNIT

PAPER NUMBER

4115

MAIL DATE

DELIVERY MODE

07/22/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/731,928	Applicant(s) YAMAMOTO ET AL.	
	Examiner BOB CHUMPITAZ	Art Unit 4115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. JP 2002-356128.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/01/07; 12/09/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This communication is a Non-Final Office Action in response to application filed December 9, 2003. Claims 1-14, as originally filed are presented for examination on the merits.

Information Disclosure Statement

The information disclosure statement (IDS) was submitted on 12/09/2003 and 06/01/2007. The submission is in compliance with 37 CFR 1.97 and 1.98. Accordingly, the information disclosure statement was considered by the examiner.

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 2002-356128, filed on December 9, 2002.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 1 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 1 recites a system comprising a "scenario", "a context", "an extraction unit", "a detection unit", and "execution unit"; however as presented in the claims it is not directed to any form of structure. This subject matter is not limited to that which falls within a statutory category of invention because it is limited to a process, machine,

manufacture, or a composition of matter. The claim recites function descriptive material and a function descriptive material is non-statutory subject matter.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6, 7, 13, 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 6 and 13, recite: "when it is detected". It is unclear and indefinite to what the applicant is referring to. For examining purposes Examiner will interpret "what it is detected" refers to context.

As per claim 7 and 14, recite: "the services are held". It is unclear and indefinite to what structure contains the held relations between the devices necessary to execute the service.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Combs et al. US 7,058,508 B2 (hereafter referred as Combs) in view of Kenji

Fujimoto, Shozo Azuma, Masaki Minami, Yasuhiko Miyazaki JP 2001195372 A
(hereafter referred as Fujimoto).

As per claim 1, Combs discloses a distributed system in which a plurality of devices are coupled to each other through a network, comprising:

a service scenario which describes functions necessary to provide a service and relations between the functions in general description (Combs: col. 1, lines 31-47 building management professionals maintain maintenance records which indicate preventative maintenance and routine repair....record used to remind building management to schedule service; see also, col. 2, line 66 – col. 3, line 11 method and system for the automated building service brokering...monitor multiple devices in multiple locations; see also, col. 4, lines 3-12 the communication link between the service providers and the automated building services broker can be a wireless link....can be a pager-type, cellular communication or a data communication network). Examiner interprets the service providers and building systems entities to represents the plurality devices required to perform a service scenario.

Combs, however does not explicitly disclose a service scenario.

Fujimoto teaches service scenario stored in a repository and retrieved service scenarios (Abstract: service scenarios are retrieved from a service scenario repository with the utilization location of the user a key and the service scenario to be executed is selected from the retrieved service scenarios based on the user information...the service scenario is executed and the user is provided with the service).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the maintenance records of Combs to include a service scenario repository as taught by Fujimoto in order to include the functions required to perform a specified service.

a context which serves as a criterion for selecting devices to be used in providing the service (col. 2, line 66 – col. 3, line 11 the automated building service broker can be communicatively linked to a plurality of building systems and to a plurality of service providers....each deemed suitable for performing maintenance and repair; see also, col. 7, lines 43-53 the service provider database can be consulted to identify a set of approved services providers for providing the scheduled maintenance);

an extraction unit which extracts devices necessary for the service based on the service scenario (col. 1, line 59 – col. 2, line 4 Bergeron teaches a control system that can access a database of field service engineers designated to provide services to a particular site and establishing communication; see also, col. 3, lines 12-38 the service provider can be selected based on whether the selected service provider is suitable to perform required maintenance and repair);

a detection unit which detects devices located in a site where the service can be provided to a service requester (col. 3, lines 12-38 the automated building service broker can include a Global Positioning System (GPS) data processor for processing the GPS data associated with the communicatively linked service providers the GPS data corresponding to a geographic position); and

a service execution unit which executes the service for the service requester by linking the devices detected based on the context (col. 2, line 66 – col. 3, line 11 the automated building service broker can be communicatively linked to a plurality of building systems and to a plurality of service providers....each deemed suitable for performing maintenance and repair; see also, col. 8, lines 38-61 the process of brokering a building service request can begin in any of steps 1, 3, and 12).

As per claim 2, Combs further discloses wherein the extraction unit extracts the devices by inquiring a server holding a database concerning attribute information of the devices (col. 1, line 59 – col. 2, line 4 Bergeron teaches a control system that can access a database of field service engineers designated to provide services to a particular site and establishing communication; see also, col. 3, lines 12-38 the service provider can be selected based on whether the selected service provider is suitable to perform required maintenance and repair; see also, col. 8, line 19-37 conventional server interactions).

As per claim 3, Combs further discloses wherein the detection unit detects the devices located in the site where the service can be provided by acquiring information on the devices extracted by the extraction unit (col. 3, lines 12-38 the automated building service broker can include a Global Positioning System (GPS) data processor for processing the GPS data associated with the communicatively linked service providers the GPS data corresponding to a geographic position).

As per claim 4, Combs further discloses wherein the service execution unit collects information from the devices detected by the detection unit and compares the

collected information with context information to select available devices (col. 2, line 66 – col. 3, line 11 the automated building service broker can be communicatively linked to a plurality of building systems and to a plurality of service providers....each deemed suitable for performing maintenance and repair; see also, col. 4, lines 41-56 the step of detecting a need for service in a building system can include sensing an error condition; see also, col. 8, lines 7-18 and 38-61 based on estimated time of arrival at the building site or other factors such as geographic proximity or comparative suitability for performing the requested service....compared to other service providers receiving ...a particular service provider can be selected....the process of brokering a building service request can begin in any of steps 1, 3, and 12).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Combs in view of Fujimoto in further view of Sameshima et al. US 6,983,306 B1 (hereafter referred as Sameshima).

As per claim 5, Combs and Fujimoto do not disclose wherein when the context changes while the service is being executed, the detection unit redetects devices in accordance with the context having changed.

Sameshima teaches a processing program of devices to deal with changes and updates (col. 1, lines 6-22 a distributed system which is employed in the environment where the state of the surroundings of the control machines or the objects is continuously changed due to transfer of a control machine or and object, or a change in a control target; see also, col. 3, lines 16-24 an inter-device cooperative control system and an apparatus therefor in which each device can change its operational conditions;

see also, col. 3, lines 35-46 to form a link according to changes in the environment and conditions; see also, col. 12, lines 8-67 when a change occurs in its device conditions, the device sends a conditional change notice, and the device receives this notice, see Fig. 31 and associated text).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the services of Combs and Fujimoto to include a processing program as taught by Sameshima in order to provide a process that can react to service changes conditions and since system conditions change with time according to the configuration and operational conditions of devices constituting the system.

As per claim 6, Combs further discloses wherein when it is detected, while the service is being executed, that there is a change in situations of the devices located in the site where the service can be provided to the service requester, the detection unit redetects devices (col. 4, lines 41-56 the step of detecting a need for service in a building system can include sensing an error condition; see also, col. 6, lines 19-40 detect in a building system a need for service; see also, col. 6, line 54 – col. 7, line 5 the control system can detect anomalies).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Combs in view of Fujimoto in further view of Sameshima.

As per claim 7, Combs and Fujimoto do not disclose wherein relations between the devices necessary to execute the service are held for each user requesting the service, and the devices are linked depending on the users.

Sameshima teaches a system wherein a plurality of devices and processing programs are linked in operation according to purposes of the user (col. 10, lines 41-67 links between devices are dynamically controlled by utilizing functional information and conditional information owned by each device....information storage table; see also, col. 15, lines 11-22 condition storage table; see also, col. 17, line 49 – col. 18, line 4 in this system there exists a plurality of devices and processing programs of these devices are linked in operation based on user request...devices are linked in operation according to purposes of the user; see also, col. 20, lines 3-26 external storage unit).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the services of Combs and Fujimoto to include a system as taught by Sameshima in order for the plurality of devices to inter link in operation based on information on the physical environment and user request.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Combs in view of Fujimoto.

As per claim 8, Combs discloses a brokering method using a context in a distributed system in which a plurality of devices are coupled to each other through a network, the method comprising the steps of:

preparing a service scenario and a context, the service scenario describing functions necessary to provide a service and relations between the functions in general description, the context serving as a criterion for selecting devices to be used in providing the service (Combs: col. 1, lines 31-47 building management professionals maintain maintenance records which indicate preventative maintenance and routine

repair....record used to remind building management to schedule service; see also, col. 2, line 66 – col. 3, line 11 method and system for the automated building service brokering...monitor multiple devices in multiple locations; see also, col. 4, lines 3-12 the communication link between the service providers and the automated building services broker can be a wireless link....can be a pager-type, cellular communication or a data communication network). Examiner interprets the service providers and building systems entities to represents the plurality devices required to perform a service scenario.

Combs, however does not explicitly disclose a service scenario.

Fujimoto teaches service scenario stored in a repository and retrieved service scenarios (Abstract: service scenarios are retrieved from a service scenario repository with the utilization location of the user a key and the service scenario to be executed is selected from the retrieved service scenarios based on the user information...the service scenario is executed and the user is provided with the service).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the maintenance records of Combs to include a service scenario repository as taught by Fujimoto in order to include the functions required to perform a specified service.

extracting devices necessary for the service based on the service scenario (col. 1, line 59 – col. 2, line 4 Bergeron teaches a control system that can access a database of field service engineers designated to provide services to a particular site and establishing communication; see also, col. 3, lines 12-38 the service provider can be

selected based on whether the selected service provider is suitable to perform required maintenance and repair);

detecting devices located in a site where the service can be provided to a service requester (col. 3, lines 12-38 the automated building service broker can include a Global Positioning System (GPS) data processor for processing the GPS data associated with the communicatively linked service providers the GPS data corresponding to a geographic position); and

executing the service for the service requester by linking the devices detected based on the context (col. 2, line 66 – col. 3, line 11 the automated building service broker can be communicatively linked to a plurality of building systems and to a plurality of service providers....each deemed suitable for performing maintenance and repair; see also, col. 8, lines 38-61 the process of brokering a building service request can begin in any of steps 1, 3, and 12).

As per claim 9, Combs further discloses wherein, in the extracting step, the devices are extracted by inquiring a server holding a database concerning attribute information of the devices (col. 1, line 59 – col. 2, line 4 Bergeron teaches a control system that can access a database of field service engineers designated to provide services to a particular site and establishing communication; see also, col. 3, lines 12-38 the service provider can be selected based on whether the selected service provider is suitable to perform required maintenance and repair).

As per claim 10, Combs further discloses wherein, in the detecting step, the devices located in the site where the service can be provided are detected by acquiring

information on the devices extracted in the extracting step (col. 3, lines 12-38 the automated building service broker can include a Global Positioning System (GPS) data processor for processing the GPS data associated with the communicatively linked service providers the GPS data corresponding to a geographic position).

As per claim 11, Combs further discloses wherein, in the step of executing the service, information is collected from the devices detected in the detecting step, and the collected information is compared with context information to select available devices (col. 2, line 66 – col. 3, line 11 the automated building service broker can be communicatively linked to a plurality of building systems and to a plurality of service providers....each deemed suitable for performing maintenance and repair; see also, col. 4, lines 41-56 the step of detecting a need for service in a building system can include sensing an error condition; see also, col. 8, lines 7-18 and 38-61 based on estimated time of arrival at the building site or other factors such as geographic proximity or comparative suitability for performing the requested service....compared to other service providers receivinga particular service provider can be selected....the process of brokering a building service request can begin in any of steps 1, 3, and 12).

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Combs in view of Fujimoto in further view of Sameshima.

As per claim 12, Combs and Fujimoto do not disclose wherein when the context changes while the service is being executed, devices are redetected in accordance with the context having changed.

Sameshima teaches a processing program of devices to deal with changes and updates (col. 1, lines 6-22 a distributed system which is employed in the environment where the state of the surroundings of the control machines or the objects is continuously changed due to transfer of a control machine or and object, or a change in a control target; see also, col. 3, lines 16-24 an inter-device cooperative control system and an apparatus therefor in which each device can change its operational conditions; see also, col. 3, lines 35-46 to form a link according to changes in the environment and conditions; see also, col. 12, lines 8-67 when a change occurs in its device conditions, the device sends a conditional change notice, and the device receives this notice, see Fig. 31 and associated text)

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the services of Combs and Fujimoto to include a processing program as taught by Sameshima in order to provide a process that can react to service changes conditions and since system conditions change with time according to the configuration and operational conditions of devices constituting the system.

As per claim 13, Combs further discloses wherein when it is detected, while the service is being execute, that there is a change in situations of the devices located in the site where the service can be provided to the service requester, devices are redetected (col. 4, lines 41-56 the step of detecting a need for service in a building system can include sensing an error condition; see also, col. 6, lines 19-40 detect in a building system a need for service; see also, col. 6, line 54 – col. 7, line 5 the control system can detect anomalies).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Combs in view of Fujimoto in further view of Sameshima.

As per claim 14, Combs and Fujimoto do not disclose wherein relations between the devices necessary to execute the service are held for each user requesting the service, and the devices are linked depending on the users.

Sameshima teaches a system wherein a plurality of devices and processing programs are linked in operation according to purposes of the user (col. 10, lines 41-67 links between devices are dynamically controlled by utilizing functional information and conditional information owned by each device....information storage table; see also, col. 15, lines 11-22 condition storage table; see also, col. 17, line 49 – col. 18, line 4 in this system there exists a plurality of devices and processing programs of these devices are linked in operation based on user request...devices are linked in operation according to purposes of the user; see also, col. 20, lines 3-26 external storage unit).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the services of Combs and Fujimoto to include a system as taught by Sameshima in order for the plurality of devices to inter link in operation based on information on the physical environment and user request.

Examiner has pointed out particular references contained in the prior arts of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply

as well. It is respectfully requested from the applicant, in preparing the response, to consider fully the entire references as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Joao (US 6,283,761 B1) Apparatus and method for processing and/or for providing healthcare information and/or healthcare-related information.
- Takatori et al. (US 6,778,654 B1) System for transfer control of telephone line.
- Berman et al. (5,995,939) Automated networked service request and fulfillment system and method.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BOB CHUMPITAZ whose telephone number is (571)270-5494. The examiner can normally be reached on M-TR: 7:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BRADLEY BAYAT can be reached on (571) 272-6704. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 4116

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

B. C.
Examiner, Art Unit 4115

/Bradley B Bayat/
Supervisory Patent Examiner
Art Unit 4115